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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,913	07/25/2001	Susumu Ibaraki	YAMAP0585USA	7360

7590

03/24/2005

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EXAMINER

CALLAHAN, PAUL E

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,913

Applicant(s)

IBARAKI ET AL.

Examiner

Paul Callahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO-800)
 Paper No(s)/Mail Date P.C.
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-20 are pending in this application and have been examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 7/7/1997. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains the passage: "A data control message comprising the steps of: at least one of the following steps:" It is not clear whether this passage is intended to mean one of the steps under subsection A) or if it is intended to mean either one of step A) or step B). Claim 2 is dependent on claim 1 and is therefore rejected on the same basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 5 is rejected under 35 U.S.C. 102(a) as being clearly anticipated by Sugiyama et al., US 5,923,486.

Sugiyama teaches a method for detecting data control information (abstract) comprising the step of: detecting predetermined permission and/or prohibition information prior to copying of data (col. 3 lines 55-65), wherein in the case where the predetermined permission information is detected from the data prior to the copying of the data, the predetermined permission information is invalidated, and then the copying of the data is permitted (col. 8 lines 12-29, col. 9 lines 35 through col. 10 line 7), and wherein in the case where the predetermined permission information is not detected from the data, and the predetermined prohibition information is detected from the data prior to the copying of the data, the copying of the data is prohibited (col. 3 line 60 through col. 4 line 7).

7. Claim 6 is rejected under 35 U.S.C. 102(a) as being clearly anticipated by Erickson 5,765,152.

Erickson teaches a method for detecting data control information (abstract) comprising the step of: authenticating a digital signature $f(M)$ in data based on a digital code M which is derived from data (col. 5 lines 25-45), wherein in the case where the digital signature $f(M)$ in the data is authenticated prior to copying of the data, the copying of the data is permitted, and wherein in the case where the digital signature $f(M)$ in the data is not authenticated prior to the copying of the data, the copying of the data is prohibited (col. 7 lines 25-30, col. 14 lines 15-30).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 3, 7, 8, 10, 11, 13-17 and 18-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art as disclosed in Sec. 2 of the specification: "Description Of The Related Prior Art", and Loiacono, US 5,293,422.

As for Claims 1, 3, 7, 15-17 and 20, the applicant's admitted prior art teaches a data control method comprising the steps of: A) at least one of the following steps: A-1) embedding prohibition information in data, wherein copying of the data is to be prohibited (Page 1: 2nd, 3rd Para., Page 2: 2nd Para.); and A-2) embedding the

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prohibition information and N pieces of permission information in the data where N is a natural number (Page 3: 3rd Para.), and B) detecting the prohibition and/or permission information prior to the copying of the data (Page 1: 3rd Para., Page 2: 1st, 2nd Para.). The applicant's admitted prior art does not teach such a data control method wherein; the copying of the data is to be permitted N times; at least one of the N pieces of permission information in the data is invalidated, and then the copying of the data is permitted. However Loiacono does teach a system where N uses of data is controlled by N pieces of control data where each piece of control data is invalidated for each of N instances of usage of the data. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system taught by the applicant's admitted prior art. The desirability of making this combination is found, for example, in col. 1 lines 25-40 of Loiacono, where the desirability of controlling the number of instances of usage of digital media is taught.

As for claim 8, the applicant's admitted prior art teaches a device for embedding data control information according to claim 7, wherein the section for embedding permission information has a code extracting section for extracting a digital code from the data (Page 2: 2nd Para.).

As for claims 10, 11, 13 and 14, the applicant's admitted prior art teaches those additional features of the claim that are not found in claim 1 and taught by the combination of the applicant's admitted prior art and Loiacono as discussed supra,

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namely a determining section which sets a copy permission/prohibition flag to be in a copy permissive state and then outputs the flag in the case where the permission information is detected by the permission information detecting section; and sets the copy permission/prohibition flag to be in a copy prohibited state and then outputs the flag in the case where the permission information is not detected by the permission information detecting section, and the prohibition information is detected by the prohibition information detecting section (Page 1: 3rd Para., Page 2: all).

As for claims 18 and 19, the claims represent the device carrying out the method of claim 17 and it therefore rejected on the same basis as that claim.

10. Claims 2, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art as disclosed in Sec. 2 of the specification:

"Description Of The Related Prior Art", and Loiacono, US 5,293,422 as applied to claims 1 above, and further in view of Sugiyama et al., US 5,923,486.

As for claims 2 and 4, the combination of the applicant's admitted prior art and Loiacono teach a data control method according to claim 1, but not one wherein the permission information is a digital signature $f(M)$; and the digital signature $f(M)$ is derived based on a digital code M which is extracted from the data. However Sugiyama does teach this feature (fig. 15, 16, 17, col. 11 line 38 through col. 12 line 15). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention

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to incorporate this feature into the system taught by the combination of the applicant's admitted prior art and Loiacono. I would have been desirable to do so as this would allow for greater security in formation of the usage permission information and copyright information.

As for claim 9, the applicant's admitted prior art teaches a device for embedding data control information according to claim 8, but not one wherein the section for embedding permission information includes: a signature section for generating a digital signature $f(M)$ based on the digital code M which is extracted by the code extracting section; and a signature embedding section for embedding the digital signature $f(M)$ generated by the signature section in the data as the permission information. However Sugiyama does teach this feature (fig. 15, 16, 17, col. 11 line 38 through col. 12 line 15). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system taught by the combination of the applicant's admitted prior art and Loiacono. I would have been desirable to do so as this would allow for greater security in formation of the usage permission information and copyright information.

11. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of the applicant's admitted prior art, Loiacono, and further in view of Erickson 5,765,152.

The combination of applicant's admitted prior art teaches and Loiacono teaches a device for detecting data control information, but not one wherein the permission information detecting section includes: a signature extracting section for extracting a digital signature $f(M)$ which is embedded in the data; and an authentication section which generates a digital signature $f(M)$ based on the digital code M extracted by the code extracting section and a second public key, compares the generated digital signature $f(M)$ with the digital signature $f(M)$ extracted by the signature extracting section, and validates a copy permission flag and outputs the flag if the digital signature $f(M)$ is authenticated. However Erickson does teach these features (abstract, col. 5 lines 25-45, col. 7 lines 25-30, col. 14 lines 15-30). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system taught by the combination of the applicant's admitted prior art and Loiacono. It would have been desirable to do so as this would allow for greater security in formation of the usage permission information and copyright information.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Caldwell, can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is: (703)

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872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

3-18-2005

Paul C. Walker

Andrew Caldwell

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER